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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,037	10/21/2003	John F. McEntee	10004031-23	7537

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EXAMINER	
AFTERGUT, JEFF H	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/691,037	MCENTEE, JOHN F.	
	Examiner	Art Unit	
	Jeff H. Aftergut	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Maronian et al for the same reasons as expressed in paragraph 2 of the Office action dated 2-24-06.

With regard to the newly presented limitation "wherein said second layer is held in radial tension and", the applicant is advised that: (1) the claim does not state when the layer is held in radial tension (i.e. in the manufacturing process after curing and before removal from the mold the layer is maintained under tension and is thus "held" under tension , see column 3, lines 52-54), and; (2) Maronian et al clearly suggested that layer 12 is placed in compression and that layer 10 remains in some state of tension subsequent to lamination as it should be noted that layer 12 would not be placed in compression if layer 10 did not remain in tension, see column 2, lines 23-29. when one reads the reference to Maronian et al as a whole one readily would have understood that the layer 10 remained in tension while the layer 12 was in compression subsequent to the bonding of the layers.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 14-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of McKinney further taken with Maronian et al and Jacobs for the same reasons as expressed in paragraph 4 of the Office action dated 2-24-06.

With regard to new claim 27, note as previously discussed that expansion of the layer in order to place the layer in compression was known per se and that it was well recognized to perform expansion by heat expanding. Such was taken as conventional in the art. It would have additionally been understood as conventional in the art to chemically expand the layer as such is an art recognized equivalent means for expansion of the layer(as opposed to heat swelling of the layer).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 as presented in the reply of 5-22-06 as "original" states "A method according to claim 16 wherein after bonding to the second and third layers and third layers.", however the claims should read --A method according to claim 16 wherein after bonding to the second and third layers, the first layer is held in compression by the second and third layers.--. Correction is requested.

Response to Arguments

7. Applicant's arguments filed 5-22-06 have been fully considered but they are not persuasive.

It should be noted that applicant has amended the claim to recite that the layer is held under radial tension in claims 14 and 16. However as expressed above and as noted in the previous Office action, the tensioned and stretched layer subsequent to the bonding operation must remain in a tensioned state to some degree as it was necessarily maintained in tension in order to keep the other layer therein under compression. Note that all tension is not removed as discussed at column 2, lines 23-29 of the reference. The applicant is advised that the presented limitation is not as limiting as applicant argues, i.e. the claims are not commensurate in scope with the applicant's arguments. To begin with the presented requirement that the layer is kept under tension does not define when it is kept under tension. Additionally the degree of tension that is kept in the layer is not defined in such a way as to define over Maronian et al.

Regarding the rejection under 35 USC 103, the admitted prior art and McKinney both failed to teach that those versed in the art would have held the central layer in compression while the two outer layers were held in tension. As expressed by applicant

in the admitted prior art it appears that in the finished assembly it was known to hold the central core in compression, however the reference to the admitted prior art did not express this was achieved by bonding the assembly with the exterior layers held in tension but rather it was stated to have been achieved by bonding a soft inner core of elastomer to harder exterior rubber layers.

The reference to Maronian disclosed that one skilled in the art would have placed a layer in compression by applying tension to one layer and bonding an untensioned layer to the tensioned layer followed by removal of the stretch applied to the tensioned layer. Removal of the stretch does not appear to remove all of the tension in the previously stretched rubber layer and it placed the adjacent layer of rubber in compression. The applicant is referred to column 2, lines 23-29 for example. The reference to Maronian suggested that the specified arrangement for applying compression to the layer resulted in an assembly which was self healing which was superior to prior art self healing septum materials. As such, it would have been obvious to the ordinary artisan to hold the central core in compression by tensioning the two exterior layers of rubber in either one of the admitted prior art of McKinney for making a septum.

The reference to Maronian did not provide a tension layer on opposite sides of a core assembly, however those skilled in the art of septum manufacture would have understood that such an arrangement would have been desirable as evidenced by Jacobs. Applicant is advised that while the prestressing was removed the laws of conservation of energy suggest that the force applied to the same must have gone

somewhere in order to be balanced out. As with Maronian, the tension forces were transferred to place the adjacent layers in compression and the degree of compression was enough to balance out the remaining tension forces remaining in the layer subsequent to relaxation whereby the layer which was prestressed remained in a lower stressed state that the adjacent layer was placed in compression. This is what one skilled in the art would have expected to have happened and the reference to Jacobs was supplied to evidence that those skilled in the art practicing the processing o Maronian in McKinney or the admitted prior art would have understood to place both exterior layers in tension and join them to the core in order to palce the core in compression subsequent to assembly. Note that the combination suggested that the layers which were pretensioned were in fact held under tension within the meaning of the term as claimed subsequent to the bonding operation.

It should be noted that the applicant did not expressly address the specific dependent claims and thus applicant is advised that he has acquiesced to the same. Namely, the various means to place the elastomeric material into compression as well as tension were taken as conventional to the art and one skilled in the art would have been expected to select from the commercially and well known ways to achieve the same. Applicant is referred to MPEP 2144.03 for information regarding the same. Since applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner is hereby clearly indicating that the common knowledge or well-known in the art statement is taken to be admitted prior art because

applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate.

No claims are allowed.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
June 14, 2006